

COMMONWEALTH OF KENTUCKY
BEFORE THE PUBLIC SERVICE COMMISSION

In the Matter of:

AN ADJUSTMENT OF RATES OF BIG)
RIVERS ELECTRIC CORPORATION) CASE NO. 9006

O R D E R

IT IS ORDERED that Big Rivers Electric Corporation ("Big Rivers") shall file an original and 12 copies of the following information with the Commission by May 30, 1984. Each copy of the data requested should be placed in a bound volume with each item tabbed. When a number of sheets are required for an item, each sheet should be appropriately indexed, for example, Item 1(a), Sheet 2 of 6. Include with each response the name of the witness who will be responsible for responding to questions relating to the information provided. Careful attention should be given to copied material to insure that it is legible. Where information requested herein has been provided along with the original application, in the format requested herein, reference may be made to the specific location of said information in responding to this information request. When applicable, the information requested herein should be provided for total company operations and jurisdictional operations, separately. If neither the requested information nor a motion for an extension of time is filed by the stated date, the case may be dismissed.

Issue: Pro Forma Adjustments

1. With regard to Exhibit 5, Entries 1 and 2, of the application provide an explanation of why the fuel cost of December 1983 is more representative for rate-making purposes than the weighted average test year fuel cost for rates that will not become effective until October 1984.

2. Provide a detailed analysis, with supporting workpapers, of how the pro forma levels of KWH generation were determined for individual generating stations as shown on Exhibit 5, Entry 3, page 2 of 4.

3. Provide the workpapers used to develop the estimates for lime requirements at Wilson No. 1, as shown on Exhibit 5, Entry 4, page 2 of 2.

4. Entry 5 of Exhibit 5 shows the revenue adjustments related to the pro forma power requirements, which eliminates 100 percent of the test year revenue from Jackson Purchase. Explain why the adjustment does not reflect 100 percent of the pro forma revenue from Jackson Purchase.

5. Provide the current status and scheduled in-service dates for the non-Wilson plant scheduled to be placed in service in 1984 as shown on Exhibit 5, Entry 12, pages 5 and 6.

6. Provide a detailed description of the procedures Big Rivers employs in selecting insurance coverages and insurers for the items shown on Exhibit 5, Entry 14, page 2 of 2.

7. Exhibit 5, Entry 18, reflects pro forma interest capitalized of \$13,746 and the testimony in Exhibit 20 indicates over \$28 million in Wilson No. 2 construction is now reported in Plant

Held for Future Use and the related interest expense of approximately \$3 million is being charged to expense. Explain the accounting and rate-making treatment proposed for these capital and carrying costs.

8. With regard to Exhibit 5, Entry 20, and Item 14(a), page 59 of 154, of the response to the Commission's Order of April 2, 1984, and the test year expense at the Green Station for Maintenance of Boiler Plant, provide a detailed analysis of the test year expense of \$2.4 million showing any major, extraordinary, or non-recurring expenditures which caused the increase of \$400,000 from the preceding year.

9. With regard to Entries 19 and 20 of Exhibit 5, explain the reasons for using the nameplate ratings of the Green units as the basis for the adjustments and provide any other comparative measures that were considered but not used in the adjustments.

10. With regard to Exhibit 5, Entry 21, provide the following information:

(a) A schedule of test year labor costs in a format similar to the one on pages 3 through 8 of Entry 21 for pro forma labor costs.

(b) Test-year-end annualized labor costs compared/reconciled with the pro forma costs shown in Entry 21, page 2.

(c) A comparison of the test-year-end number of employees and the number of employees included in the proposed adjustment.

(d) A comparison of the test year monthly rates for medical insurance and the pro forma rates shown on page 10 of Entry 21.

11. Explain the selection of 55 percent as the portion of Wilson fixed costs to be deferred as shown on Exhibit 5, Entry 23.

12. Explain the selection of 45 percent as the portion of Wilson fixed costs to be deferred as shown on Exhibit 5, Entry 30.

Issue: Test Year Expenses

13. Provide an explanation for why ratepayers should be required to pay for donations such as the \$45,417 reported in Item 20(c) of the response to the Commission's Order of April 2, 1984.

14. Provide the following information concerning the 1982 annual report printed by Creative Press at a cost of \$33,000:

(a) The number of copies printed.

(b) A list of the persons and organizations receiving copies of the report.

15. Provide the following information concerning the test year expense of \$845,000 for Outside Services Employed:

(a) A description of the additional services provided during the test year which caused the expense to increase from the \$468,000 reported in 1982.

(b) The amount of expense incurred during the test year for the preparation of this case.

Issue: Net Investment Rate Base

16. Provide an explanation for the proposed inclusion of the cost of Wilson No. 1 in rate base as shown on Exhibit 9, page 3, under the lease deferred case.

17. Provide calculations, and supporting workpapers, for the proposed increases in fuel stock, materials and supplies, and prepayments.

Issue: Times Interest Earned Ratio

18. Explain the basis for the TIER requests of 1.07 under the ownership deferred case and 1.15 under the lease deferred case.

19. Identify and explain any earnings ratios other than TIER used as the basis for the requested revenue increase.

Issue: Deferral Plan

20. On page 11 of Exhibit 14, Mr. Hollander states that the deferral concept will minimize the effects of rate shock by smoothing the rate increases over time. Lines 19 through 27 state further that although future rates will be higher, the present value of future increases will be less to the ratepayers.

(a) Provide any present value analysis studies to support this statement. State all assumptions.

(b) If no studies were performed, provide other support for the statement.

Issue: Load Forecast

21. Provide the latest Big Rivers forecast for both energy and demand. A complete description and documentation of the methodology and data used to develop the forecast should also be provided.

22. Based on the latest forecasts provide estimates of Big Rivers projected reserve margins for the period 1984-1994. A

description of how the reserve margin is determined should also be provided.

Issue: Price Elasticity

23. Were any price elasticity values used to adjust billing determinants in this case? If so, provide all associated workpapers.

24. Was the price elasticity analysis provided by Ms. Weatherby used in any way to adjust revenues in this case? If so, provide all associated workpapers.

25. Were any price elasticity values actually calculated by Ms. Weatherby? If so, provide these values and all supporting workpapers.

26. Since the demand study provided by Ms. Weatherby is based only on information for residential customers of Jackson Purchase RECC, how valid is the study for making inferences about the residential demand on the other cooperatives' systems?

Issue: Cost of Service Study

27. Provide an explanation of why the average and excess demand allocation method used in the cost of service study is appropriate for the Big Rivers system.

28. Provide any additional workpapers used in preparing the cost of service study provided by Mr. Solomon that are not included in Exhibit 17.

29. On page 41 of 50 of Exhibit 17 provide an explanation of why each of the pro forma adjustments listed is considered an adjustment to capacity expenses.

Issue: Rate Design

30. On page 6 of 12, Exhibit 18, Mr. Gross states on lines 155-159 that the reductions in revenue requirement caused by leasing Wilson Unit No. 1 or the deferral of Wilson Unit No. 1 costs are considered as capacity related costs.

(a) Please explain.

(b) Assuming that Wilson Unit No. 1 has been constructed to meet Big Rivers' energy needs as well as its capacity needs, and that some portion of the reductions should be considered energy related, how will the rate design likely be affected?

Issue: System Planning

31. On page 5 of 7, Exhibit 19, Mr. Burkhard refers to a unit commitment program used to project the KWH to be generated by each unit during the first year of operation of Wilson Unit No. 1. Please provide:

(a) An explanation of how the program operates including the inputs and assumptions required;

(b) Documentation or user's manual for the program if it is readily available;

(c) The inputs used to give the results in RFB-2 in Exhibit 19; and

(d) The output from the program.

32. On RFB-2 of Exhibit 19 the line entitled Purchase Power Requirement appears to correspond to Big Rivers contract for SEPA peaking power. Why is the energy taken under this contract spread evenly across 12 months?

33. On line 9, page 6 of 7, of Exhibit 19, a reference is made to current market price for short term capacity of 85 cents/KW/week.

(a) Provide support for this figure as a market price.

(b) How does this relate to Big Rivers cost to provide capacity?

Issue: Conversion of Wilson Unit 1 From High
Cost Thiosorbic Lime to Cheaper Limestone

34. Will not this require a larger quantity of the cheaper limestone than the thiosorbic lime and also generate a larger quantity of sludge in the scrubber? If so, then will the increased costs still be an economical trade-off?

Issue: Big Rivers Rules and Regulations, Par. "J"

35. Why should not the customer's power factor be required to be higher than 85 percent?

36. Why is there no penalty for low power factor?

Issue:

37. Exhibit 22, Floyd Mitchell Testimony.

(a) Furnish workpapers showing how the estimated savings were calculated, as listed in items 1 through 8 on pages 16 and 17.

Issue: Rate Design

38. Provide the supporting workpapers along with a detailed explanation of how the pro forma billing units shown on Exhibit 5, Entry 5, page 2 of the application were determined.

Issue: Coal Inventory

39. Provide the working papers used to calculate the average daily burn for the test year and each of the five years preceding the test year provided in Big Rivers' response to Staff Request No. 1 dated April 2, 1984, Item 39c, line 16.

40.(a) What is Big Rivers' target coal inventory level and/or coal inventory policy? (Include a target tonnage level and number of days supply.)

(b) What factors did Big Rivers consider when determining its target coal inventory level?

(c) Provide a copy of any coal inventory analysis that Big Rivers performed to determine or to support the determination of its target coal inventory level and/or coal inventory policy.

41. What was the test year end (as of December 31, 1983) coal inventory level in tons, dollars, and number of days supply (based on the 12-month average daily burn rate for the test year)?

42. Provide a graph of Big Rivers monthly ending coal inventory levels (in tons) including coal receipts (in tons) and coal burned (in tons) from January 1, 1978, through December 31, 1983.

Issue: Normalized Revenue

43. Provide a schedule to show separately by month and for the test year ended December 31, 1983, the actual fuel revenues recovered (a) through the base rates and (b) through the monthly fuel adjustment clause.

44. Provide a schedule to show separately by month and for the test year ended December 31, 1983, the normalized fuel revenues recovered (a) through the base rates and (b) through the monthly fuel adjustment clause assuming the base fuel cost of \$.01556/KWH had been in effect for the entire test year.

Issue: Fuel Cost Synchronization

45. Provide a reconciliation of actual fuel costs for the test year (including Big Rivers share of HMP&L Station 2) shown in Exhibit 5, Entry 9, page 2 of 2 (\$122,928,468) with the actual fuel cost for the test year shown in Big Rivers' response to the Commission's Order of April 2, 1984, Item 41, page 2 of 2. (\$122,920,578.)

46. Provide a reconciliation of actual fuel costs for Big Rivers' generating units for the test year shown in Exhibit 5, Entry 2 (\$98,382,579) with Exhibit 11, Statement of Revenues and Expenses - year to date (\$99,585,036) and with the 1983 Annual Report, Statements of Revenues and Expenses, page 13 (\$99,375,000).

Issue: Pro Forma Adjustments

47. Are the unit costs used to adjust the cost of fuel consumed by Big Rivers' generating units and HMP&L Station 2 in Exhibit 5, Entries 1 and 2, the weighted average costs of fuel for December 1983? Provide a copy of the working papers showing the calculations of these unit costs.

48. Refer to Exhibit 5, Entry 3, page 2 of 4. What would the fuel cost in mills/KWH for each unit be if based on actual fuel costs for the test year in lieu of the pro forma shown?

Provide a copy of the working papers showing the calculation of the actual fuel cost in mills/KWH.

49. Provide documentation for the actual Jackson Purchase 1983 revenue of \$14,292,014 shown in Exhibit 5, Entry 5, page 2 of 2.

50. Provide a copy of working papers showing how the other intersystem sales of 1,140,745 MWH was determined in Exhibit 5, Entry 7, page 2 of 2.

51. Provide a copy of the working papers showing how the average system fuel cost of 15.033 mills/KWH for December 1983 was determined in Exhibit 5, Entry 7, page 2 of 2.

Issue: Change in Fuel Adjustment Clause Base

58. Big Rivers is requesting, in effect, a deviation from 807 KAR 5:056 Section 1(12), Fuel Adjustment Clause regulation, so that it may change the base fuel cost in this rate proceeding.

(a) Provide a detailed statement as to why Big Rivers should be granted such a deviation in this rate proceeding.

(b) Provide a statement as to why Big Rivers believes that the proposed change in the base fuel cost cannot wait until the next regular two-year fuel adjustment clause roll-in (Spring of 1985) especially in light of the fact that the proposed base fuel cost is based on projected rather than actual generation costs and generation mix associated with the commercialization of Wilson No. 1.

Done at Frankfort, Kentucky, this 16th day of May, 1984.

PUBLIC SERVICE COMMISSION



For the Commission

ATTEST:

Secretary